



Friction & Types of Friction

A. Choose the correct answer:

1. What is friction?

- (a) A type of fuel
- (b) A push or pull on an object
- (c) A force that opposes motion
- (d) A type of pressure

2. Which of the following surfaces will produce more friction?

- (a) Smooth glass
- (b) Oiled metal
- (c) Rough sandpaper
- (d) Wet plastic

3. Which type of friction occurs when an object starts to move?

- (a) Static friction
- (b) Sliding friction
- (c) Rolling friction
- (d) Fluid friction

B. Fill in the Blanks:

1. Friction is a _____ force that acts in the direction _____ to motion.
2. _____ friction is the force that prevents a stationary object from moving.
3. Friction between rolling object and surface is called _____ friction.

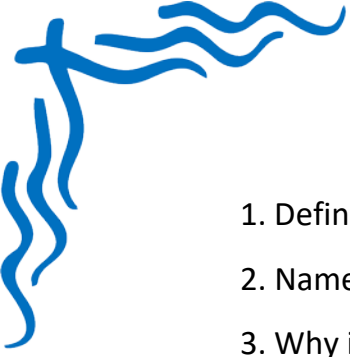
C. Case Study:

Neha tried to push a heavy box on the floor. Initially, it was hard to move, but once it started sliding, it became easier. Later, she placed round rollers under the box, and it moved even more smoothly.

Case Study Questions:

1. Why was it difficult for Neha to move the box at first?
2. What type of friction was acting when the box was at rest?
3. What happened when she used rollers under the box?
4. Which type of friction is less: sliding or rolling?

D. Short Answer Questions:



1. Define friction.
2. Name and define the four main types of friction.
3. Why is rolling friction less than sliding friction?

E. Long Answer Questions:

1. Explain what causes friction and how it affects the motion of objects.
2. Compare static, sliding and rolling with examples.
3. Discuss the advantages and disadvantages of friction in daily life.